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ORIGINAL ARTICLES.

Physical Examination of a Patient Prior to an Operation on the Eye.

Read before the Topeka Academy of Medicine and Surgery, June 12, 1893.

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It is a self-evident proposition that in order to intelligently treat any disease we must carefully and thoroughly examine the parts involved. This is as certainly true of the affections of the eye as of any other organ.

In making such an examination, a definite plan should be followed, even in seemingly simple cases, for fear that in a hurry the busy practitioner might often omit some of the details, minor though they may seem, which in the summing up may be of assistance in reaching a diagnosis.

A record should be kept of each case, including name, age and occupation, and nationality of the patient; also a full history of the patient's general condition, the various diseases from which he or she has suffered from their earliest recollection, the times or number of times he or she has had ocular trouble, and, if possible, the medication to which they have been subjected.

A careful scrutiny of the patient should be made. This can be done during the time that the patient is making his statements, (this in every case should be done by himself and not the friends for him unless a child or for some other good reason,) and at the same time unknown to him. If a child, take particular notice of the skull; if it be large or small, the natural prominences in the parieties and forehead, whether increased or diminished, and the seams slow in closing or compact; whether the chin be sharp and teeth projecting, with a tendency to fall out or decay; the chest be narrow and prominent (pigeon-breasted), interfering with breathing; spine curved and pelvis narrow; the abdomen large—out of proportion to the remainder of the body. From these external appearances you would naturally suspect deranged nutrition, or, as we would term it, rickets. After a while the digestion becomes impaired, the urine shows abundance of the earthy phosphates, and the bones become soft and bend, and the child becomes shockingly deformed.

In large cities about fifty to eighty per cent. of the children who present themselves to clinics show signs of rickets. These children do not live, and are prone to other ailments.

Here comes a patient—an aged one. In him we see that old age is a period of diminished energy.

This is characteristic, and with it there is a diminution of all the powers of vigorous manhood.

The machinery of life is wearing out. The activity is less, the paces slow, the pulse less vigorous and the grip not so strong. The old man no longer attempts great enterprises, nor could he carry them out if undertaken. He does not readily adapt himself to changes in his environment. His food is more slowly digested. Assimilation and elimination are imperfectly carried on to a greater or less extent. His bones have become brittle, and when broken unite slowly and imperfectly. His convalescence after even slight attacks of sickness, is tardy. His teeth decay and his brow shows the wrinkles of advanced age. His arteries become hard and lose their elasticity. All his

special senses lose their acuteness. These conditions are not measured by the number of years of a man's life as by the constitution and his habits of life. Some men are eighty at fifty.

Advanced life is immune to contagious and zymotic diseases. He has also passed the period in which hereditary diseases are prone to develop, but on the other hand he has reached the period when local troubles seem to possess their greatest activity and virulency. The powers of resistance are below par. He is prone to albuminuria and Bright's disease, or some trouble of the urinary organs.

Believing in the above creed, I addressed the following letter to fifteen different oculists, and received replys which I give later on in full.

The following is the letter sent:

DEAR DOCTOR.—Will you do me the kindness by returning brief replies to the following queries:

1. Do you make it a rule to make a chemical analysis of the urine before operating on the eye?

2. In this examination what would you consider unfavorable to an operation?

3. Would the finding of an excess of the earthy phosphates contraindicate an operation?

4. Would you consider the presence of albumen an unfavorable symptom to an operation?

5. Would the finding of sugar in small quantities be unfavorable?

6. Would you refuse to operate if the fourth and fifth condition prevailed temporarily or permanently?

We will now hold a sort of an experience meeting and listen to what some of our oculists have to say on this subject:

"DEAR DOCTOR.—The only value of urinary examinations is for sugar in persons suspected of having diabetes, and in such cases the probabilities of difficulty of healing of wound and other complications should be taken into consideration, especially in making a prognosis. I consider these examinations and make them in all cases where there is the slightest probability of diabetes. W. F. MITTENDORF,
New York City."

"DEAR DOCTOR.—An excessive quantity of sugar or albumen or tube casts I would consider unfavorable to an operation, but would nevertheless operate if sight depended on the operation after doing what I could to fortify against accidents.

"The presence of an excess of the earthly phosphates shows nutrition greatly at fault, and an operation would depend altogether on the general health. The results in such cases are not so promising, hence preparatory treatment would be best.

"THOS. E. MURRELL,
"Little Rock, Ark."

"DEAR DOCTOR.—The presence of sugar or albumen would influence my prognosis, but would not deter me from operating later on after patient had undergone general treatment. Sugar would be unfavorable, it being an abnormal condition and indicating disease.

"In cataractous and glaucomatous patients we have no choice except as stated before to defer operation and await effects of general treatment until a more favorable condition be established.

"BOERNE BETTMAN,
"Chicago, Ill."

"DEAR DOCTOR.—The finding of albumen, sugar, tube casts and blood would be unfavorable. Sugar is likely to complicate matters. There are conditions and circumstances when we operate in the presence of the gravest complications.

"DANIEL A. THOMPSON,
"Indianapolis, Ind."

"DEAR DOCTOR.—I make it a rule to make a chemical analysis of the urine before cataract operations, enucleations and iridectomies, and all operations of necessity. I do not make this examination unless the history and physical examinations suggest it. Analysis of the urine is for the complete knowledge of all factors of the case and not a detriment to an operation except in cataract cases. Casts or albumen in the urine would weigh unfavorably against the ad-

ministration of ether, but the necessity of the case would be paramount, and the administration of ether while renal disease existed, might be the choice of evils facing the surgeon.

"The presence of albumen would add a decidedly unfavorable weight to the prognosis, but would not forbid an operation. The finding of sugar in small or even large quantities, I would not consider unfavorable to an operation. I have operated on more than twenty cases of diabetic cataract with good results and without damage to general condition. In my early practice I acquired a dread of operation upon the uveal tract in diabetic patients that I have not gotten over. I have seen atrophy of the globe follow iridectomy and choroiditis with diminished tension, but in the removal of cataract in diabetic cases the results have been very satisfactory. I operated upon one case last January who was passing eleven pints of urine with five per cent. glucose, with a result of 20-20 vision with a + 10 D., and the diabetic condition has been better rather than worse since. Would not decline to operate if either sugar or albumen were present, if the operation was for the relief of the patient or to preserve usefulness. I should, however, decline operations for cosmetic purposes, *e. g.*, strabismus in the adult. In general, renal diseases do not interfere with results of an operation, but makes the administration of ether subject to consideration. Diabetes, not being a renal disease, is subject to other rules.

"C. M. HOBBY,
"Iowa City, Iowa."

"DEAR DOCTOR.—I never make a chemical analysis of the urine only in cases of cataract. The presence of albumen and sugar, generally speaking, would be considered unfavorable. Temporary presence of albumen in small quantities may or may not mean organic disease of the kidneys. If permanent and associated with granular or hyaline casts, it would be considered to that degree unfavorable. So also with sugar—if the glycosuria is associated with serious organic lesions, the more unfavorable. In cataract cases the finding of sugar and albumen would be considered unfavorable to an operation, but having placed the state of things before my patient, indicating as nearly as I can the additional risk run, so far as ultimate vision is concerned, where projection is good and other conditions of the symptoms not unfavorable, I never refuse to operate, it matters not how much sugar or albumen be present, even if only temporary relief can be given, just as I would act in other domains of surgery.

"C. A. WOOD,
"Chicago, Ill."

"DEAR DOCTOR.—In regard to the presence of albumen being an unfavorable condition to an operation, it would depend wholly on the kind of operation and what the albumen was due to. The presence of sugar would hardly prevent me; it might even be an argument in favor of the operation. Glycosuria could be the result of eye muscle strain, and an operation would relieve it. "CHAS. H. BEARD,
"Chicago, Ill."

"DEAR DOCTOR.—I make no examination of the urine except in cases of cataract at times, and that only when I think possibly the cataract depends upon kidney trouble. Do not consider the presence of albumen unfavorable unless in large quantities and patient's general condition bad. The finding of sugar in small quantities would not be an objectionable factor.

"EDMUND C RIVERS,
"Denver, Col."

"DEAR DOCTOR.—I do not make it a rule unless the general condition of the patient calls for such investigations. Excessive amounts of sugar or albumen connected with a broken constitution would make me feel suspicious. If all other conditions were favorable and albumen present, I would not necessarily refuse to operate. The same way with sugar. However, this would depend upon my estimate of the particular patient's power of endurance. If after an examination of the entire patient I decide that the shock of operation is not liable to do harm, and that the wound is likely to heal well, I operate, and not otherwise. As a matter of fact, I very rarely see a

patient unsuitable to eye operations as they are now performed. LEARTUS CONNOR,

"Detroit, Mich."

"DEAR DOCTOR MAGEE.—I would make it a rule to examine the urine of every patient before operating on the eye. I have the following recorded in my case-book: Name, address, specific gravity, reaction, color, albumen, sugar, sediment, remarks.

"I would not operate on a patient having diabetes mellitus, which means *sugar in the urine constantly*.

"I would not consider 'an excess' of the earthy phosphates of much consequence, and would operate as though they were 'not in it,' if the patient's general health was good.

"I pay more attention to albumen than phosphates, and would keep a patient under treatment, if albumen was present, until I could learn all about his constitutional condition. If I found that the patient had Bright's disease, I would be loth to operate for fear the result might not be satisfactory after the lens was removed.

"If I find albumen, I give a guarded prognosis.

"I would not consider sugar or albumen in *small quantities* unfavorably, especially if they prevailed temporarily.

"Yours most sincerely,

"JAMES P. PARKER,

"St. Louis, Mo."

"DEAR DOCTOR.—I usually make an examination of the urine before extraction of cataract. Albumen and granular or fatty casts are unfavorable. Sugar not so much so. Earthy phosphates would not be considered unfavorable; neither would albumen, unless in large quantities. Small quantities of sugar would affect the prognosis some; however, I would not refuse to operate. Some years ago I operated on both eyes of an old gentleman for cataract and got vision of each 20-30. Some months afterwards he returned with vision somewhat reduced, think probably 20-40, with a thin membrane in each pupil (secondary cataract). By his urgent request, I needled both eyes, and lost both through sloughing of both cornea. I examined his urine (had not done so before) and found it full of sugar. Most respectfully,

"WM. CHEATHAM,

"Louisville, Ky."

"DEAR DOCTOR.—I often examine the urine, but not constantly. Albumen and tube casts would be considered unfavorable, yet if the patient is blind from cataract, I would operate, as I find wounds healing very well even in such patients, and I do not often lose eyes. Would not refuse to operate in either case, albumen or sugar. Better run the additional risk than remain blind from cataract, even with these complications, for the majority of the extractions are successful. Very respectfully,

"J. J. CHISHOLM,

"Baltimore, Md."

SUMMARY.

1. As to making an examination of urine: Six, never make a urinalysis; seven, only in cataract cases; two, only where they are suspicious.

They all recognized the unfavorable condition of the presence of sugar and albumen, and but one would refuse to operate, and he only where it remained permanently in the urine.

Not one considered the presence of an excess of the earthy phosphates of sufficient importance to make any notice of it.

NOTES.

1. If the patient was willing to take his chances, all were willing to operate, no matter if albumen or sugar were present, and run the risk as to results.

2. One thought that where the glycosuria was due to ocular disturbance, it could be relieved by the operation.

3. Two would first place their patients upon general treatment.

4. Three, give fair results in diabetic patients in extraction of cataract.

5. One went even so far as to say he would operate, no matter how much sugar or albumen were present, if nothing more than temporary relief was obtained.

"For the body is not one member, but many."

"There should be no schism in the body,

but that the members should have the same care one for another."

"And where one member suffers, all the members suffer with it; or one member be honored, all the members rejoice with it."

"And the eye cannot say unto the hand, I have no need of thee; nor, again, the head to the feet, I have no need of you."

Paul well recognized the connecting links of the great systems of the body—circulatory and nervous systems.

He knew the functions of the sympathetic system; we sometimes forget it. How quickly a message is transferred from some remote point to the central nervous system giving the intelligence that it is in distress.

We forget, but seem to think, that a serious lesion may exist, and the remaining functions of the body go right on undisturbed.

Prick the hand at a given point, and in a very short space of time an area extending many millimeters away on every side will be involved.

Every little lymphatic, artery and vein that has any connection with the point injured will begin active measures to repair the damage done—"suffering with it."

Suppose in this case the circulatory system was at fault in any way, either in amount of blood furnished or quality, would repair take place? Or again, suppose the lymphatic system were at fault—that which carried away the waste products from this injured point? Or the eliminating organs were tardy in removing the waste from the venous channels? What would be the result? Would repair proceed? Would the heaped-up waste material, added to the additional hindrance of a blood supply, below par in nutritious qualities, increase the reparative process?

In the eye, particularly where a section of the cornea has to be made, two disadvantages are met which are not found together in any other tissue of the body:

1. The cornea has no direct vascular supply.

2. The corneal tissue is severed wholly in twain.

The conjunctival vessels come up to the edge of the cornea, where they cease, forming there at the limbus, the network of marginal loops which are supplied by the anterior ciliary vessels.

From the marginal loops the blood plasma passes over into the system of lymph passages in the cornea, and in this manner its nutrition is carried on.

It has been our practice to make a thorough chemical and microscopical examination of the urine of each patient prior to an operation, testing carefully for albumen, sugar, excess of the earthy phosphates, tube casts, blood or pus, taking into consideration the reaction and specific gravity. There are probably few diseases which alter the blood so completely as does chronic Bright's disease. The blood corpuscles go on, steadily diminishing, while the fibrin holds its own and the quantity of albumen fluctuates considerably.

Besides these changes the blood often retains its effete products, since the kidneys are incapable of performing their function.

The alteration and gradual impoverishment of the blood make themselves manifest by the increasing debility, and by the pallor and waxy look of the countenance.

Albumen in the urine is indicative of structural changes in the kidneys themselves, as in acute and chronic Bright's disease.

It may also be present as a result of some abnormal condition of the circulation or circulating fluid, viz.: Pregnancy, scarlet fever, ague, diphtheria, articular rheumatism, heart disease, abdominal tumors.

In diabetes the skin is dry and harsh with a tendency to desquamation. The circulation is feeble and there is often some cyanosis of portions of the extremities—the feet and legs are cold. Acne pustules, boils and carbuncles occur not unfrequently in elderly diabetics. To these are added a steadily-progressing waste of the body, muscular feebleness, chills and a peculiar odor of the breath, resembling chloroform.

Its presence in the urine is a result of disease or injury of certain parts of the nervous system and form impediments to the respiration.

Diabetes is a very fatal disease, yet it is impossible to foretell its exact mode of termination. Some are cut off rather suddenly, others drag out a long existence, and die worn out and dropsical.

The relative frequency in which diabetes effects the eye is shown by the following statistics, collected by Galezowski: In 144 cases of diabetes, 46 had cataract, 27 had retinitis, 31 had amblyopia, 10 had paralysis of eye-muscles, 7 had iritis.

Spencer says operations for the removal of cataract in diabetic patients are generally undertaken in young subjects, but these are not free from danger, as there have been deaths from coma following this operation.

Samuelshon says that the healing process in diabetic patients, after the removal of cataract, is liable to disturbance by attacks of iritis.

Abdominal surgeons tell us that in albuminuric and diabetic patients the healing process is very tardy, taking more than double the length of time than if these conditions were not present, and sometimes union did not take place at all by primary union, but sloughed.

The same is true of earthy phosphates. They are found in many affections in which the vital powers have been seriously lowered. They are encountered in persons, says DaCosta, laboring under great general debility and indigestion, associated with an impaired tone of the nervous system.

Such a state is not uncommon in men depressed by mental toil or anxiety.

The physician must endeavor to form a clear conception in a given case as to how the whole organism has been affected by a particular disease, the character of the disease, what harm it has done the entire organism as well as locally.

In short, when the patient presents himself for an operation, it is the duty of the physician to examine the patient carefully, take no chances on a casual ocular inspection, but use every available means within his knowledge to ascertain the cause of the patient's trouble, his physical condition and his chances of prospective beneficial results from an operation.

For time is a small factor in a great many eye cases, and if the patient be not in a good condition physically at present, a few weeks' time with proper constitutional treatment, he can be put in a good physical condition and thus his chances are increased many fold, otherwise if a hasty operation were made it might have resulted seriously and disastrously to him.

A burnt child dreads the fire. A patient presented himself for cataract extraction. Asking carefully about his condition; said he felt well; operated; sloughing of the cornea took place; eye destroyed. Afterward said he had chilled every other day before coming to our office. Another in which the cornea broke down and eye destroyed. Said after the operation, when he was told the eye was not doing well, that he was subject to dyspepsia, and could not eat at those times. An attack of this, his old trouble, came in immediately after the operation. A third in which the urine was examined and found loaded with the earthy phosphates and tube casts; was put on treatment and sent home. Presented himself again; the amount of phosphates lessened; sent home again. A few weeks later, on examination, the quantity of phosphates were reduced. On solicitation of patient and his friends, a cataract extraction was made; the eye was lost. In three of the four cases reported, a little undue haste was exercised. In the fourth case, the last one, we were forced into it.

As to constitutional treatment, preparatory to an operation, it depends entirely upon the character of the trouble.

A general tonic treatment, a proper diet and looking after the excretory organs that they are doing their work properly, will add largely to the success of any operation.

In conclusion:

1. Examine your patient carefully.

2. Leave no stone unturned in endeavoring to find his physical defects.

3. Remember in examining a patient that we are dealing with a fellow creature, and that all our inquiries and all our investigations must be conducted with the utmost courtesy, kindness and patience.

4. The physician must be a student of human nature; he must know his patient's habits and tendencies.

5. Exhaustive catechizing need not be done in every case. In urgent cases or accident the first examination must be limited and at best rapid.

6. The occupation, temperment and manner of living of the patient should be recognized in making up his environments after an operation.

Works consulted: DaCosta's Physical Diagnosis, Kirke's Physiology, Osler's Practice.

Should a Mydriatic be Used as a Rule in Refraction Cases? What One?

Read before the section of ophthalmology and otology of the Kansas Medical Society, at Topeka, May 12, 1893,

BY

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The object of the inquiry is to learn the practice of oculists respecting the frequency with which they use a mydriatic and the kind employed, together with the reasons for their practice and remarks on the subject. With this in view, the following is a copy of a letter sent to twenty-two oculists of the United States:

TOPEKA, KAS., May 26, 1891.

DEAR SIR.—In what per cent. of your cases of refraction do you use a mydriatic? ("A") the mydriatic approximately.

1. Atropine, —— per cent. of cases?
2. Homatropine, —— per cent. of cases?
3. Cocaine, —— per cent. of cases?
4. If other mydriatic, name it; —— per cent. of cases?

"B". Refraction approximately in which you use it.

1. Presbyopia, ——.
2. Hypermetropia, ——.
3. Myopia, ——.
4. Astigmatism, ——.

An early reply will greatly oblige.

Yours very truly,

J. E. MINNEY.

Answers were received from each one as follows:

"I seldom use a mydriatic except in cases of young persons with astigmatism or hypermetropia. DR. E. L. HOLMES,

"Chicago, Ill."

"I use a mydriatic in about twenty-five per cent. of my refraction cases; in convergent strabismus and esophoria I use it in all cases. DR. H. KNAPP,

"New York."

"I use a mydriatic in about thirty-three per cent. of my refraction cases.

"DR. JULIAN J. CHISHOLM,

"Baltimore, Md."

"I have practically given up the use of a mydriatic in refraction cases for the past fifteen years. The only very rare exception being cases of high grades of hypermetropia in children. DR. G. STRAWBRIDGE,

"Philadelphia, Pa."

"I use a mydriatic in all cases under forty-five, and some to fifty or over.

"DR. EDWARD JACTION,

"Philadelphia, Pa."

"Regarding a mydriatic, I use invariably homatropine six per cent., dropping in one drop, following it up from three to five minutes; following this up a third time after a similar interval, and then waiting about an hour before making the examination.

"In almost all the cases complete paralysis is effected, and the entire examination completed in about an hour and a half. I formerly used atropine, but found it so very inconvenient to the patient that I abandoned it entirely upon ascertaining the results of the work accomplished by homatropine in this strength. When weaker solutions are used, it is entirely unreliable.

"DR. A. E. PRINCE,

"Springfield, Ill."

"I do not use a mydriatic as a routine practice. The one I now employ most extensively is the hydrobromate of homatropine. The indication for the use of a mydriatic in my practice is the age of the patients and the non-harmony of the findings by the test letters; the ophthalmoscope

and the skerascope, and the cases of astigmatism by the ophthalmometer.

"DR. SWAN M. BURNETT,
Washington, D. C."

"I find atropia sulph. gives me better satisfaction than any other mydriatic. I have at times given it up for others, but return to it with more confidence than ever. I occasionally find a ciliary muscle it will not paralyze, but have found nothing else when it fails. Homatropine, in my estimation, is very unsatisfactory. The ophthalmoscope is of great service to me in determining when the accommodation is paralyzed.

"DR. WM. CHEATHLAM,
Louisville, Ky."

"In presbyopia there is danger of bringing on glaucoma by the use of atropine, and as nearly all hypermetropia has become manifest there is no reason for using atropine. Myopia only in cases where it is progressive. Hypermetropia and astigmatism, if glasses fail to give satisfactory vision or the ophthalmoscope indicates very much higher degree than the patient will accept.

"DR. WM. F. MITTENDORF,
"New York City."

"I use only homatropine in refraction tests. It is satisfactory to me. Occasionally a case requires atropine.

"DR. S. C. AYERS,
"Cincinnati, O."

"I use a mydriatic in the correction of all errors of refraction if the patient has the time to submit to it, as I find it very rare indeed to meet with an individual who has been driven to consult an oculist in consequence of a refractive trouble who has not a pathological condition of the back-ground, varying from a slight hyperæmia to severe inflammation, resulting in structural changes and loss of function. The mydriatic is used for the double purpose of relieving this trouble of the back-ground, at the same time putting the eye in a condition in which we are able to make a perfect examination and correction.

"I have no confidence in any mydriatic for correcting refractive trouble, excepting atropine, having tried them all from time to time, and have found that they cannot be relied upon.

"Homatropine and cocaine are used in refractive cases only for the purpose of making a thorough examination. For simple presbyopia, not associated with hypermetropia, myopia or astigmatism, I do not use a mydriatic. I might say that I correct astigmatism altogether now by means of Javal's and Schiotz ophthalmometer, and find it absolutely reliable. I look upon it as the most correct instrument yet invented for the correction of astigmatism.

"DR. JOHN L. FULTON,
"St. Paul, Minn."

"I use a mydriatic in all cases except presbyopia. I have had cause to regret writing a paper on homatropine while assistant in the eye department of the Jefferson Medical College Hospital of Philadelphia. I then had great confidence in homatropine, but my successors have had to prescribe atropine and do my work over in cases of low degree of astigmatism. Homatropine will not unmask low degrees of astigmatism. Hyoscyamine (sulph.) is better than homatropine. I am afraid of it since I had a patient experience the systemic effects of the drug to such an exaggerated degree. I now prescribe sulph. of atropia in all cases when the patient can afford to take the necessary time for its effects to wear off. I prescribe homatropine only when the patient is in a great hurry to return to work. I often fail to correct low degrees of astigmatism on account of the patients deceiving themselves, but I am sure that I get better results with atropine than any other mydriatic. Its effects last long enough for you to study the patient and learn if he is deceiving himself, which is very hard to overcome in some patients.

"DR. JAS. P. PARKER,
"Kansas City, Mo."

"I do not use homatropine or cocaine as a mydriatic, and do not use atropine in myopia except in the progressive form. I prefer the ophthalmoscope, retiniscopy and Javal-Shiotz ophthalmometer in refraction cases.

DR. EUGENE SMITH,
"Detroit, Mich."

"I use atropine in nearly all cases of hypermetropia when the patient is under thirty years of age; also if the objective test does not correspond with the estimate of hypermetropia with the ophthalmoscope, or if the symptoms point to an error of refraction which is not manifest. If the patient is over twenty-five, I try homatropine.

"Myopia in young patients, when the degree of myopia is slight, I use homatropine. If a higher degree is discovered, and I suspect slight spasm of accommodation, atropine is used. In patients over twenty I dispense with the mydriatic. In all cases of astigmatism, when the patient is under twenty, I use atropine; if over twenty, I try homatropine. Over thirty I dispense with the mydriatic. Of course you can readily understand that these are not iron-clad rules, and that the exceptions are numerous. I believe that there is no department of our work in which there is more room for judgment than in refraction work.

DR. E. J. GARDINER,
"Chicago, Ill."

"It is my practice to use a mydriatic in all cases under thirty years of age requiring compound lenses. Atropine one per cent. solution is the form of mydriatic I prefer. I have used homatropine two per cent. solution, duboisine one per cent. solution, but do not consider them reliable, and only these when atropine is for some reason contraindicated. I have never used cocaine in refraction cases, and never used a mydriatic in presbyopia patients, and only a small per cent. of cases in simple hypermetropia. I prefer to correct the manifest defect and increase the strength of the lens as the defect comes out. It occasionally happens that I am obliged to adjust cylinders and even compound lenses without the use of a mydriatic, but I tell the patient that I am not sure that I have fitted them correctly, and that their glasses may have to be changed.

"DR. W. T. MONTGOMERY,
"Chicago, Ill."

"I have to-day run over my last 250 cases or more; properly speaking, 500 eyes with the followtng results: Of the 84 4-5 of astigmatism, there were of hypermetropic astigmatism 67 4-5 per cent.; myopic astigmatism, 13 1-5 per cent.; mixed astigmatism, 3 4-5 per cent. A considerable number of the cases of hypermetropic and myopic astigmatism were simple. I have left out presbyopia because it does not cut much of a figure in my records. My homatropine mixture is of the strength of eight grains to the ounce. In persons under forty-five years I put one drop in each eye every ten minutes until ten drops have been put in each; then I consider the accommodation fully suspended and the patient ready for the work of refraction. If age has partly suspended accommodation, I use fewer drops of the homatropine solution. If the patient be fifty-five to sixty or older, I usually instill only one drop. In all patients over forty-five, after the refraction has been accomcomplished, I use from one to five drops of a solution of esserine in each eye. In persons under forty-five, who must resume near work inside of thirty-six to forty-eight hours, I use eserine as above. I suppose that eighty-five per cent. of my cases are under forty-five years, hence have no presbyopia.

"DR. G. C. SAVAGE,
"Nashville, Tenn."

"Atropine is used whenever I suspect spasm. Hyperopia with limited accommodation. Myopia of the young—estimate, five per cent.

"2. Homatropine generally. Exceptions: Myopia of the aged alone after forty-five years. Mydriatics are used with extreme caution, say ten per cent.

"3. Cocaine only as a preliminary to ophthalmoscope or ophthalmometer. No estimate.

"4. Many years ago I used duboisine in perhaps fifty cases. I do not use any other mydriatic than atropine and homatropine. I do not use a mydriatic in simple presbyopia. I invariably use a mydriatic in hyperopia under forty years of age; also in myopia under forty years of age. I use a mydriatic with the addition atropine test in the young. In astigmatism, under forty years of age, I make a double determination: First, without a mydriatic; second, with and

am guided in the compromise by the measurement by Javal's ophthalmometer. I believe that the 'half has not been told' concerning the influence of the ciliary muscle upon refraction.

"DR. C. M. HOBBY,
"Iowa City, Iowa."

"I use a mydriatic in all cases of refraction excepting in uncomplicated cases of presbyopia. I use hydrobromate of homatropine, one grain dissolved in one drachm of distilled water; of this I instill a single drop every minute or two until ten or twelve applications have been made. After fifty or sixty minutes after the last application the accommodation is usually found suspended. In three out of 572 cases homatropine failed and the sulphate of atropine was employed. Cocaine does not suspend the accommodation, and is therefore totally unfit for use in testing refraction. It is a patent fact that a person in good health, requiring above one-sixtieth for comfortable reading, has hypermetropia, and to determine the refraction a mydriatic is necessary.

"I have often seen persons wearing negative lenses who, upon suspending the accommodation, turned out to be hypermetropes. It is very common to find persons with hypermetropic astigmatism wearing negative lenses prescribed by some person who thinks himself able to determine the refraction by ophthalmoscopic examination.

"In my opinion no error of refraction in any person under forty years of age can possibly be corrected without first suspending the accommodation.

"DR. DUDLEY S. REYNOLDS,
"Louisville, Ky."

"I use a mydriatic in perhaps ten to twenty per cent. of my presbyopes, and always use it in cases other than presbyopes. I use instillations of homatropine every five minutes for about three-fourths of an hour; then one or two of cocaine. Have every proof that this plan gives paralysis of the ciliary muscle.

"DR. GEO. M. GOULD,
"Philadelphia, Pa."

"I use homatropine, four per cent. solution, and only when the tests do not satisfactorily agree so that there may be a possibility of incomplete relaxation of the ciliary muscle. I use atropine for several days, but I find this necessary in very few cases; I am sure not one in one hundred. I never use a mydriatic for presbyopia, and I think nobody does; but I use it in every case of refraction whenever the various tests (test type, accommodation, reading ophthalmoscope or shadow) do not fully agree; and in young persons always when astigmatism is shown or suspected, as for instance in cases like this which are not uncommon: Young man, aged twenty; healthy; complains of eye pain and blurred vision when working over books. All you can find is hypermetropia .50 D., with vision 20-20, good accommodation and normal muscular action. Here I always suspect hypermetropic astigmatism .50 D. instead of hypermetropia. I usually find it under homatropine, for a .50 D. plain hypermetropia does not give any trouble to the eye unless its possessor is in poor health or of a neurotic stock. On the other hand, when the ophthalmoscope shows, for instance, M. 3 D., when neither the shadow or astigmometer shows any astigmatism. When the trial lenses show M. 20-20 with 3 D. and accommodation power is satisfactory, why should I then use a mydriatic? and I do not.

"So you see, my dear doctor, that I do not practice in groves cut by theoretical rules and views, but allow common sense a wide, free scope in any refractive work.

"DR. F. T. HOTZ,
"Chicago, Ill."

"I rarely use a mydriatic in these cases. The ophthalmoscope and the Javal-Schiotz ophthalmometer and the ordinary examination with glasses enables me to reach safely a diagnosis.

"DR. RICHARD H. DERBY,
"New York City."

"Astigmatism is the affection in which a mydriatic is most generally employed, and that my preference in these cases is, on the whole, for homatropine; but since using the Javal-Schiotz ophthalmometer I regard the

paralysis of the accommodation as less generally necessary.

"DR. H. DERBY,
"Boston, Mass."

"In myopic astigmatism, both simple and compound, atropine is rarely necessary. In marked compound hyperopic astigmatism it may often be dispensed with. In simple hyperopic astigmatism it will often be necessary, and the same remarks apply to mixed astigmatism. In my own practice a mydriatic is used in from thirty to forty per cent. of the cases excepting presbyopia, and atropine is the mydriatic relied upon.

"To obtain the best results with safety, in the shortest time and with the least inconvenience to the patient, is the object of the physician. DR. NOYES,
"New York."

SYNOPSIS.

1. Five of the twenty-two oculists use a mydriatic in all cases of refraction. Two in ninety per cent. or over of the cases. Three in twenty-five per cent. Six seldom use it. Six do not use it as a routine practice.

2. The kind of midriatic used. Five in seventy-five to one hundred per cent. of their cases use atropine. Seven in sixty-five to one hundred per cent. use homatropine. Three do not use homatropine. One uses homatropine and cocaine in seventy-five per cent. Two use cocaine in twenty to fifty of their cases. One uses duboisia, four per cent. solution, in some cases.

3. The kind of refraction cases. One uses cocaine in ninety per cent. of presbyopia. One uses homatropine and cocaine in ten to twenty per cent. of cases of hypermetropia. The others do not use a mydriatic at all in such cases.

A mydriatic is used more in hypermetropia and astigmatism than in myopia.

In my own practice atropine is the mydriatic used, but not as a routine practice.

The foregoing shows a marked difference in the practice of ophthalmologists in the frequency with which a mydriatic is used and the kind used.

All of these oculists are among the best, or are the leading ones in the profession.

They are successful, hence get good results, and their opinions have weight.

They all have the same object in view, but, like our religious denominations, go on different roads and get there.

This subject cannot be discussed at this time in its entirety, but the following considerations may enable us to see in a measure the cause for the difference in practice and results, and some of the difficulties with which the oculist has to contend.

There is a tonic contraction of the muscular system in its normal condition. The ciliary muscle is no exception to the rule. When the muscle of accommodation (ciliary) is paralyzed by a mydriatic, there is often a slight change of the refraction.

For example, if an eye is .50 D. hypermetropic, the paralysis may increase the hypermetropia .50 D. to 1 D.

The maximum dilatation is obtained. This is shown in case of paralysis of the third nerve—motor oculi—by disease.

If atropine is used in such a case, the pupil becomes more dilated.

Atropine not only paralyzes the motor or contracting fibers of the ciliary muscle and iris, but stimulates the dilating fibers or those controlled by the sympathetic.

In a very myopic eye the transverse diameter of the ciliary muscle is much smaller than in the emmetropic eye. This is due to a lack of development of the circular fibers, and in some cases they are almost entirely lacking.

The circular fibers of the ciliary muscle have to do mainly with accommodation, and in myopic eyes are but little used, hence the lack of development from non-use.

In hypermetropic eyes the opposite condition obtains. The constant accommodative effort causes a true hypertrophy of the ciliary processes. The ciliary body is much larger than in the myopic eye. "This is probably a factor in the genesis of glaucoma, owing to the enlargement of the ciliary muscle, it pushes forward against the iris and narrows the sinus of the anterior chamber."

In astigmatic eyes there is an irregular or

unsymmetrical development of the muscle of accommodation.

Rays of light, coming from a distance of six meters or twenty feet, are not parallel by from 1-6 to 1-4 D.; and if this is not taken into account, an over correction will be made and a failure to give relief.

Again: The refraction of the pupil when dilated is not always the same as that portion remaining in use after contraction of the pupil.

Again: Changes in the axis of astigmatism sometimes occur with the use of a mydriatic. All mydriatics do not paralyze the accommodation. Atropine locally applied stimulates the terminal filaments of the sympathetic and paralyzes the nerve endings of the motor oculi supplying the iris and ciliary muscle; hence completely dilates the pupil and paralyzes the accommodation. Cocaine does not paralyze the motor oculi, but dilates the pupil by stimulating the sympathetic.

The object of using a mydriatic in refraction cases is to paralyze the ciliary muscle and thus overcome spasm of accommodation and to reveal the latent error of refraction.

Durr found spasm of accommodation in from seven to eleven per cent. of 133 myopes.

Dr. Jackson found in 214 eyes latent hyperopia in thirty-two per cent., and sixty-eight per cent. having no latent hyperopia. These eyes ranged in age from fifteen to fifty years, and the highest degree of H. L. was 70 D. Latent hyperopia was least frequent under twenty years of age, being twenty-one per cent., and most frequent between forty-five and fifty, being forty-seven per cent.

This shows that latent hyperopia is the exception and not the rule, as was formerly taught, and is believed by many physicians to-day.

The following is Dr. Jackson's table—thirty:

AGE.	HAVING NO LATENT H.	HAVING LATENT H.	PER CENT. LATENT H.	AMOUNT OF H. LATENT.
15	79	21	30	0.70
25	79	21	26	0.45
25	77	23	24	0.57
30	64	36	33	0.62
35	62½	37½	26	0.41
40	68	32	20	0.31
45	62½	37½	15	0.39
50	53	47	35	0.33

"Briefly to summarize the facts to which this paper is designed to direct attention are these:

"That the latency of hyperopia is essentially exceptional, inconstant and abnormal; that it is not more frequent or proportionately greater in childhood or in early adult than in middle life; that the amount of manifest hyperopia discovered depends largely upon the method of testing for it, and from these follow certain practical deductions, viz.: A mydriatic is as frequently needed and as strong a mydriatic is needed to render manifest the total hyperopia at forty-five as at fifteen.

"In correcting hyperopia without the use of a mydriatic, the assumption would be that the total hyperopia is manifest, to add something for assumed latent hyperopia will, in the majority of cases, entail imperfect distant vision which will continue as long as the lens thus ordered is worn.

"In prescribing a lens, correcting less than the total hyperopia, we are allowing for an inconstant, temporary, mainly abnormal condition, and should warn the patient of the probable early need for a change of lenses, and that the best and most permanent relief is not to be expected until such change is made.

"It would usually be unnecessary to employ a mydriatic to render manifest the total hyperopia if we only had some certain means of detecting the exceptional cases in which it is necessary."

We have quoted largely from Dr. Jackson, first, because we agree with him, and second, because we disagree with him.

Our findings practically agree with the report as given in the foregoing table, and was determined in the following way:

1. The error was found without the atropine, and a record made of the case, and then the error was found while fully under the effect of the mydriatic, and the result recorded and the finding compared.

In order to maintain the ciliary muscle in its normal condition, it is necessary to exercise it; and in prescribing artificial help for the eyes, the weakest glass should be selected, which will enable the muscle to do

its work with comfort and at the same time give normal vision. In allowing for this accommodative effort, the judgment of the oculist is taxed.

My practice is, first, to make the test without atropine; second, to get the clearest vision — comfortable — for the work and distance required; third, then have the patient read fine print with the trial glasses one or two hours in the office twice a day, and for the same length of time at home in the evening; fourth, if these trial lenses prove to be comfortable to the eyes, and cooling as they sometimes express it, I prescribe them, aud the patient is directed to report within the next month if the glasses are not satisfactory; fifth, if the patient is in doubt or the findings do not agree, or there is an unpleasant sensation in the eyes on the use of the glasses, or the patient's answers are contradictory, atropine is used as a rule.

The patients are always asked to report within a month if the glasses are not satisfactory, for in every case allowance must be made for that unknown quantity, life force, and scientific hedging must be done.

We are under obligations to the oculists who have furnished this paper for us.

Authorities consulted: Noyes, Fuchs and Transactions of the Section of Ophthalmology and Otology of the American Medical Association.

Cholera and Its Treatment.

Read before the N. E. K. M. & P. Association at Wetmore, June 13, 1893,

By W. F. TROUGHTON, M.D., Seneca, Kansas.

Like one of the past, I shall begin with asking the question: Who in the world knows anything about the treatment of cholera?

It is a question asked with as much earnestness as it was fifty years ago, and so far as the text-books are concerned it is answered by the same lack of true knowledge as it was fifty years ago. I trust to your kind feelings and true charity, when I say that the evidence as it appears to me proves a total deficience and ignorance of its etiology, pathology and diagnosis, and also of the theraputic art. It is not to my purpose in this paper to enter into a display of figures; only I shall say that in New Castle on Tyne, in the years 1841-2, the number of deaths was 290; whilst in 1853 the deaths were 1,505. But I expect that there is no difference amongst us as to its terrible malignancy; so I shall proceed at once to review some of the past treatments, and I shall mostly ask the testimony of Dr. G. Ross, surgeon to one of the London hospitals. He collected 1,821 cases by himself, and in all he analyzed 6,146 cases. Out of the 1,821 cases of his own collection, he speaks of their treatment as follows:

At the Greville Street Dispensary, 81 cases were by salines, salts of potass. and soda, and cold water in abundance. Death rate, 8 per cent.

At the Droitwick Lunatic Asylum, 21 were treated by tartar emetic. Deaths were 19 per cent.

607 were treated by salts and emetic and abundance of cold water. Death rate, 20 per cent.

331 were treated by calomel alone, and the mortality was 31 per cent.

210 were treated by calomel and opium, and the mortality was 56 per cent., a jump from 31 to 56 as soon as opium was added to the calomel.

167 were treated with stimulants alone, he not saying what kind. Brandy we suppose would be the thing. The death rate again increased to 57 per cent.

356 were treated with stimulants — calomel and opium all combined — and the mortality ran up to 60 per cent.

48 is the last set of cases, and these were treated by venous injections, various salts and water, and the consequent mortality was 39, or at the rate of 80 per cent.

So that of the 1,821 cases we have a difference in the several rates of mortality, according to the mode of treatment adopted, ranging 8, 19, 20, 31, 56, 57, 60 and 80 respectively; in other words, ten times more died who had salts and warm water injected into their veins than those who took the same salts and cold water per the stomach,

and increasing the mortality again from 7 to 8 per cent. by the use of stimulants alone.

But Dr. Ross does not rest his case on the 1,821 cases of his own selection, but gives three tables. One by Dr. Grave, of London, giving 503 cases. One from Paris, giving 2,748 cases, and another from Vienna, containing 1,074 cases treated in the hospitals of that city and with all sorts of remedies. And yet, after his most careful separation and comparison, he gives us the following conclusion: Out of 3,055 cases, treated by brandy, ammonia and other stimulants, the mortality was 58 per cent. When opium was added out of 356 cases so treated the mortality rose to 60 per cent.

But we have given enough for our present purpose, viz.: to show that with the exception of the venous injection that there is no difference in treatment from 1832 to 1853-54-66, and without fear after taking Reynold's System of Medicine as a fair sample of modern text-books, it is opium, calomel and acetate of lead thrown in.

Such must be our excuse for our opening remarks, however unkind they may seem to be; and before we proceed further, I will state what to all who have seen this disease monster is short but yet full for all practical diagnosis.

1. Flatulency, griping, nausea, acidity and diarrhœa.

2. Cramps in stomach, rice-water stools, vomiting, prostration, sinking of the eyes, coldness and thirst; temperature about 70.

3. Collapse, increase of stools, also of prostration and cramps, extending to fingers and toes, color blue, suppressed urine and loss of speech tone.

The fourth and last may truly be called the chamber of horrors—a shrinking of tissues, restlessness, color dark blue, increase of motions, heart's action feeble, tongue shrunken, breath cold, a cold, clammy exudation and death.

Such is a word-picture of the symptoms of epidemic cholera; and most all of these take place in about the space of twelve hours.

In the absence of our modern discoveries of the coma bacillus as the producing cause of cholera, we were as a ship at sea without chart or compass. The epidemic of cholera has been called one of the latter-day judgments, and "vials" to be poured out upon the earth and to be accounted for as the shadowing forth of one of the all-wise special designs for the accomplishment of some great but yet unfathomable designs. Others leaving St. John and revelation to the care of the superstitious, speak of it as a "subtle virus" mixed in the transparent air, and beyond the reach of the alchymist and chemist, alike entering the living human system, without taste or effluvia, detectable by the finest set of nerves of taste or smell, but yet settling on the liver and producing its peculiar train of morbid action, as described before.

Before I can speak of a treatment, let me put before you what I believe to be the real cause of cholera.

I quote Dr. J. Eisenberg on "Bacteriological Diagnosis".

"The coma bacillus of Asiatic cholera are found in the intestinal canals of recently moribund cholera patients, and from the fæces of same.

"They are curved bacilli, about one-half or two-thirds at most, as long as the bacillus tuberculosis, frequently connected as to form half circles or figure-of-eight shapes. They also form long, delicate screws, resembling the spirilla of relapsing fever in length and appearance. They are pathogenic, but not found in the blood of man, but positively in the intestinal walls."

But I would suggest right here that before we have either the coma bacillus or its toxine, we must have their forerunner, viz.: changed and extraordinary meteorological conditions, solar heat and a general absence of ozone in the air; devitalized nervous systems, overwork, starvation and anxious care are the fields for its growth. A degraded and altered living element within the human body, and doubtless originating in the great nerve centers down through the sympathetic system, supplying the liver, etc.

If such is the truth, and I believe it is, I would now ask my friend Dr. McClintock,

who at our last meeting asked us to leave our text-books and become individual in our work, to follow me in what I believe to be the only rational treatment of cholera.

Cholera, then, must be treated prophylactically. Garbage systems, sewerages, flushings, lime washes, pure water and a general clean-up is all right so far as they go, but the true breeder of pathogenic disease germs is the social quagmires.

Clean out the human rookeries, the moral and physical hot-beds of crime and disease. Let in Nature's sunlight, change the atmosphere with Nature's scavenger ozone. Bath houses, soup kitchens and general contentment are as essential as garbage systems or general clean-ups. Lift the dull and soul-depressing care from off the brain and heart of the people. This is your work and it is my work. Don't be afraid of being called a political doctor; assume your full duty or honor your profession by leaving it. The day is dawning when we shall be more honored for our knowledge of true prophylactics than for our therapeutics. But on this I cannot dwell, for it leads deep down to the one only hope of ever cleaning out and draining this social quagmire which is the basis of our physical quagmires, viz.: the human being's eternal right to land; but until this is done we must search nature's laboratory for such things as we need in order to meet the present needs.

Now let us see if we understand what we want. In cholera in its manifested form we have a human being who has in his intestines some fully-developed living things called coma bacillus—fast breeders and the most rapid ptomain-producers known.

In the cholera patient we see by the light of physiology that the ptomain of the coma bacillus is exhausting the oxygen which nourishes the whole system, the oxidizing processes ceasing. The arterial blood is being changed to venous or dark, carbonated blood, having no life-sustaining power, congesting the liver, lungs, heart and kidneys; hence the feebleness of the circulation, change of color, loss of voice, cramps, rice-water stools and suppressing of urine. Stage by stage in quick succession the poisoned stream of life is giving way until it finally closes in death. Who of us are not astonished that facts so simple should not have suggested a more rational treatment than those of the text-books?

This brings me to the treatment. Amongst the list of remedies I would place three above all others, viz., lobelia, valerian and capsicum. Lobelia, one of the worst-abused medicines and yet one of the best in the whole materia medica—a bacteriacide of the first water, from the time it enters the stomach clear down through the alimentary tract, sterilizing the germs, stopping the production of ptomain and preventing cramps by its relaxing power. Valerian is antispasmodic, preventing reflex irritation and nervous exhaustion. Capsicum as a stimulant has not its equal in the whole range of medicines. As a stimulant to the nerves of the ganglionic system no stimulant and sedative will act on the stomach and intestines, both mucous membrane and glands, with such certainty.

These three made into a compound tincture and given in drachm doses in warm cinnamon tea, sweetened and given every half hour, will meet every indication of the first two stages.

In addition to the above for the third and fourth, I would give ten-grain doses of salol and flush out the bowels with peroxide of hydrogen or latic acid, or tanic acid, in proper strength, and wrapping my patient up in a blanket wrung out of hot water and mustard.

Such, gentlemen, is a brief outline of a suggestive treatment which, to my mind, meets every pathological suggestion for treatment.

TO AVOID or to overcome the unpleasant physiological effects of iodide of potassium, give with it three drops of Fowler's solution of arsenic three times a day, gradually increasing the dose as indicated.

THE State Society is continued in this number on page 214.

SOCIETY PROCEEDINGS.

Southeast District Medical Society.

This society met in Pittsburgh in the parlors of the Stilwell House, June 6, 1893.

Present: Drs. G. W. Williams, W. W. Williams, H. H. Bogle, W. E. Welch, M. E. Johnson, Sloan and Deneidman, of Pittsburgh; Drs. S. B. Boyer and L. J. Forney, of Cherokee; Drs. G. A. Morrison and C. S. Huffman, of Columbus; Drs. Pritchard, Doan, King and Barney, of Weir; Drs. J. W. Porter, Litchfield, A. C. Lyngar, Opolis, Aikman, M. F. Jarrett, Carver and Mr. Rice, of Ft. Scott; Drs. J. C. McClintock and J. E. Minney, of Topeka; Drs. J. W. Tinder, of Parsons.

Dr. Tinder read a paper on "Pneumonia." He gave a resume of the disease as taught by the best authors, and his own experience and observations, dealing principally with the etiology of the disease. From the best light on the subject he came to the conclusion that it was a specific, infectious, constitutional disease of microbic origin. It is not as infectious as the other contagious diseases, such as measles, scarlatina, etc. It is favored by radical changes in climate and by exposure, the alcoholic habit, in fact, anything which reduces the patient's vitality.

DISCUSSION.

Dr. Williams.—"It is more or less local in its origin."

Dr. King.—"While there may be cases constitutional in their origin it certainly is more particularly local. I have never known several cases at the same time in the same family, and would like to hear the experience of others on this point."

Dr. Porter.—"I had six cases of pneumonia in two families. In one family the husband and wife both had it. I do not recall any other instance in which more than one member of the same family had the disease at the same time."

Dr. Aikman.—"I believe it is often local in its origin. In twenty years' practice I have never seen an epidemic of pneumonia. It is an infectious disease."

Dr. Williams.—"It may be caused by a germ, but the cocci must have a soil to work in. There must be an injury to the lung—some lesion for the microbe to gain entrance. Epidemic pneumonia occurred in this section of the country in the winter of 1873 and 1874. The winter was open and moist. The treatment has not reduced the mortality."

Dr. King.—"It has a natural history and is self-limited. The treatment should be slightly stimulating and supportive throughout. I do not believe that pneumonia is due to bacteria."

Dr. Lingar.—"The change of treatment—and now being antibacterial—with better success proves to me its microbic origin."

Dr. Pritchard.—"I indorse the bacteriological theory of pneumonia. The proof has been found in every post-mortem case. Why it is self-limited is against the theory, yet it is the only rational explanation."

Dr. McClintock.—"The disease is self-limited for the same cause that any disease is self-limited. The increase of the toxines prove destructive to the bacteria and in this way they are destroyed and the disease cut short."

Dr. Jarrett read a paper on "Dacryo-Cystitis." He gave the literature on the subject and his own plan of treatment. In the acute stage he favored poulticing over the sac to favor the formation of pus, and then open externally; and when the swelling had passed away, to open the lachrymal canal and dilate with a probe, gradually increasing the size. The external opening should be made in the line of the fold or wrinkle of the skin of the part to prevent exposure of the scar. The sac and wound should be kept clean. If the sac continued to secrete, it should be opened up and destroyed. He did not favor wearing the stile or probe.

DISCUSSION.

Dr. Minney.—"While in certain cases when the sac is distended with pus, an external opening may have to be made; if it is possible the canaliculus and lachrymal

canal should be opened at the time. It prevents a scar on the face. There will be no opening to heal afterwards. The hemorrhage reduces the swelling by depleting the bloodvessels, the canal is open, drainage through the normal channel is secured, and no secondary operation has to be made. The sac and tract should be cleansed every day, and every second day a No. 6 to 8 Bowman's probe introduced for two or three weeks. After that the probe may not have to be introduced but twice a week for two or three weeks; then once a week for one or two months. The patient should be taught to press the secretion which may collect in the sac down into the nose, or, if that cannot be done, press it up into the eye. In many cases the stile can be worn after the acute stage has passed off. Should it be worn, the patient should be instructed to remove it if the parts become irritable, red or painful, and report to the physician. Since dacryo-cystitis is due to closure of the lachrymal canal, and the canal opens into the nasal cavity, if there is catarrh of the adjacent organs it must be treated. If there are growths obstructing the passage, they must be removed. In some cases coming under my observation syphilis was the cause of the obstruction. Local treatment, as might be expected, failed, but it, in connection with the treatment, cured each case."

Dr. Williams.—"Do you favor the formation of pus in that sac in these cases of dacryo-cystitis? I think the formation of pus should not be encouraged in these cases."

Dr. McClintock reported a case of tubercular peritonitis. In the beginning there was no indications of peritonitis, but facial neuralgia, for which a number of teeth were extracted without benefit. Finally the case drifted into his hands. The peritonitis had developed and an abdominal section relieved the neuralgia, and the patient made a good recovery."

Dr. Williams.—"How did the tubercular peritonitis cause the neuralgia?"

Dr. McClintock suggested that Dr. Minney answer the question.

Dr. Minney.—"It may have been through sympathy. Eye strain has sometimes caused general nervous prostration, and when the error of refraction was corrected, the nervous trouble ceased. Diseased uterine appendages have brought on painful vision and removal of the ovaries or ovaries and tubes has cured the eyes.

"A case of neuralgia of the ear was brought to us some six months ago. The ear had been treated for three months without any benefit. On examination, we could see no cause for the pain. The drumhead looked natural, and there was no pain on pressure of the parts. The penis was examined and there was phymosis. The child was circumcised, and the physician says the ear trouble has ceased.

"During the past eight years some three or four cases of neuralgia of the ear or eyes have come under our observation in which phymosis was present, and when the children were circumcised the eye or ear affection passed away."

Dr. Williams.—"Is it not more probable in the case reported by Dr. McClintock, that the neuralgia of the face was due to tissue starvation rather than a direct or sympathetic cause."

Dr. McClintock remarked that there was abundance of pus in the peritoneal cavity.

Someone asked how this could be when there was no opening in the peritoneum; that it was absolutely a closed sac.

Dr. McClintock said in the male such was the case, but that there was an opening in the sac in the female. (We were a little skeptical in the matter and looked it up, and find there are two openings in the peritoneum in the female.—ED.)

EVENING SESSION.

The following officers were elected for the ensuing year:

President.—Dr. Morrison.

Secretary.—Dr. Graves.

Treasurer.—Dr. Carver.

Board of censors.—Drs. Tinder, Sloan and Lyngar.

Necrology.—Drs. Draper and Shriner.

Ethics.—Drs. Porter, King and Carver.

Executive.—Drs. Huffman, Blair and Boyer.

Publishing.—Drs. Jarrett, Deneidman and Williams.

The next meeting will be held in Ft. Scott the first Tuesday in September.

The former president, Dr. Porter, and the secretary were congratulated on the successful management of the society, and tendered a vote of thanks for their meritorious work.

Dr. Morrison, on assuming the duties of president, reviewed the history of the society and said he would do all in his power to make the already-successful society more so.

The retiring president, Dr. Porter, then read his farewell address. He spoke of the nobility of the calling. Urged that truth be received wherever found and in whatever garb. His method of dealing with the druggists was different from the plan usually advised. He said to "make friends with your druggist." Considering the power the druggist has in his hands over the physician as a matter of right and policy no better advice could possibly be given. By this means he said the druggist would recommend the physician instead of the patent medicine. Druggists are compelled to keep all kinds of patent and proprietary medicines, but how easily a patient can be directed to the physician by the honest pharmacist, and this evil against the doctor in a measure overcome.

Drs. Gilbert and Boaz, formerly of Pittsburgh and members of this society; the former now in Duluth, Dak., and the latter in St. Louis, Mo., were elected to honorary membership.

Dr. Williams read a paper on fractures of the skull, reporting several cases. He gave the usual classification and also the green-stick fracture of the skull, which has been introduced since some of us studied medicine.

DISCUSSION.

Dr. Aikman reported several cases. One case in which the bone pressed against the brain for some three or four inches. He made an opening through the skin and quite a quantity of the brain substance oozed out. The plate of bone pressed down into the brain substance some three-fourths of an inch. He trephined and with the rongeur forceps removed a section of the skull the size of a silver dollar. The wound healed without the formation of pus. (This is the kind of surgery we are after.—ED.)

For drainage Drs. Blair and Williams used iodoform gauze. Dr. Aikman used a tube.

Dr. King.—"A shot-firer in the mines lit a fuse, and when about eight feet away the load exploded and a large lump of coal hit him on the head, rendering him unconscious. The left parietal bone was crushed. I removed a section of the skull two by two inches, and numerous spicula of bone and coal which were imbedded in the brain substance. I did the work aseptically, packed the opening with iodoform gauze, but my patient died within twenty-eight hours. What was the cause of death?"

In answer to Dr. King's question, it was suggested that it might have been due to extensive maceration of brain tissue or blood clot.

Dr. Carver reported the case of a colored man who was hit in the head with a billiard cue. There was depression with fracture of the parietal bone. He trephined, but the patient died. Post mortem revealed a larger fracture than appeared externally, and a large portion of macerated brain substance.

Dr. Porter reported a marked indentation or bending in of the external table of the skull from being struck on the head by a pistol barrel. The part returned to its normal position.

Dr. Deneidman reported several cases of fracture of the skull during his Indian campaign. One case in particular occurring in an Indian in the fight at Wounded Knee. A large section of the skull was carried away by a bullet, exposing the brain and permitting considerable brain matter to ooze out. It was not thought possible that the Indian could live, but after three or four days the doctor sliced the protruding portion of brain off, and the Indian soon showed signs of returning consciousness, and finally made a good recovery.

Dr. Williams said where we are sure of cleanliness no drainage is provided for, but

the fact of using drainage was a mark of fear and uncertainty on the part of the surgeon. He reported two cases of death from fracture of the skull in his practice.

Dr. W. Williams reported a case of fracture of the skull from the kick of a horse. In this case there was a loss of considerable brain substance. Iodoform gauze was packed into the hollow and removed in three days, and the patient made a good recovery.

Dr. Carver.—"Can as much of the substance of the middle lobe of the brain be destroyed as of the frontal lobe and the patient make a good recovery?"

In answer to Dr. Carver, Dr. Minney remarked in a post mortem he found from four to six ounces of pus in the middle lobe of the brain; in fact it seemed that the greater part of the lobe was destroyed. True, the patient died, but up to the second day before death the patient was conscious. For several weeks before death and before he quit work, the patient could not walk straight.

Dr. Jarrett.—"Have other methods than those of trephining been used? May trephining cause death by greater pressure on the brain? The chisel may be used in these cases to advantage."

Dr. Williams.—"The trephine is not placed on the depressed bone, but on the sound part, and it is used as a fulcrum for the instrument to rest upon when placed beneath the depressed bone through the trephine opening."

Dr. Aikman.—"The chisel is always used or some such instrument in elevating the depressed bone, but I do not think it is as good an instrument to make an opening in the skull as the trephine."

One of the general topics for discussion at the next meeting is "Make Friends with your Druggist."

Some of the other subjects (we did not get them all) are "Adenoid Growths," by Dr. Graves; "Typhoid Fever," by Dr. Pritchard; "Cystitis," by Dr. Morrison; "Abortion," by Dr. Enlow; "Life Insurance," by Dr. J. T. Tinder; "Gonorrhœal Ophthalmia," by Dr. Minney.

It was suggested that the program hereafter be made out with a view of discussing the diseases prevailing at the time of the meeting.

The merit of brain drainage by gauze and the tube was spoken of. It was thought by some that packing the gauze in an opening in the brain there was some danger of the cells in proliferating passing into the meshes of the gauze, and when the gauze was removed destroy the cells and set up more or less hemorrhage and destroy the granulations.

Dr. Aikman favored the tube.

Eastern Kansas Medical Society.

The annual meeting of the Eastern Kansas Medical Society met in A. O. U. W. Hall, 723 Kansas avenue, at 8 o'clock P. M., April 13, 1893.

President Dr. L. H. Munn in the chair.

Members present: Dr. A. B. McCandless, of Holton; Dr. C. E. Fulton, of Hoyt; Drs. O. D. Walker and W. S. Bunn, of Lawrence; Dr. C. M. Welsh, of St. George; Dr. J. H. McCasey, of Concordia; Drs. J. H. Cannon, G. A. Wall, S. E. Sheldon, W. L. Schenck, W. E. McVey, J. P. Lewis, Theo. W. Peers, S. G. Stewart, Ida Barnes, Reid Alexander, J. E. Minney, J. B. Hibben, C. A. McGuire, J. C. McClintock, Agnes McKee Wallace, Frances Storrs, J. W. Donaldson, J. L. Gilbert, Maggie L. McCrea, C. C. Bradley, R. E. McVey, A. H. Thompson, L. M. Powell, H. R. Wallace, —. Millard and W. S. Lindsay, of Topeka.

Messrs. Reeds, Gundry, Noggle, Dill, Nesbaum, Deacon, P. S. Horrigan, Dr. Mary Stewart and daughter, and Dr. J. H. Barnes of North Topeka, visited with us.

The report of the secretary for the past year is as follows:

Number of meetings held, 4; once in Junction City last October and three times in Topeka.

Number of new members received during the year, 25; honorary members, 2.

Whole number in attendance during the year, 178.

forward a copy of these resolutions to his family.

W. L. SCHENCK, M.D.,
S. E. SHELDON, M.D.,
REID ALEXANDER, M.D.

The chairman of the nominating committee, Dr. Alexander, on behalf of the committee, made the following report:

OFFICERS FOR THE ENSUING YEAR.

President.—Dr. A. B. McCandless, Holton.

Vice-president.—Dr. G. A. Wall, Topeka.

Secretary and treasurer.—Dr. R. S. Magee, Topeka.

On motion of Dr. Minney, a vote of thanks was extended to the president for the able manner in which he had presided over the meetings of the society during the past year, after which the society adjourned to meet in Topeka in July.

Respectfully,
R. S. MAGEE, M.D.,
Secretary.

The State Medical Society.

SECTION OF OPHTHALMOLOGY AND LARYNGOLOGY.

This section convened Friday morning. The first thing on the program was an address by the chairman, Dr. W. E. McVey. He had chosen for the subject of his remarks "The Physiology of Voice Production." He said: "In order that the most perfect results in voice production may be obtained, the muscles of the larynx and throat must be perfectly free and unrestrained in the performance of the functions for which they are especially adapted. One of the essential features in securing this condition is correct breathing. Diaphragmatic breathing is the most natural and the best. Breath control is also important. Breath should be controlled by the diaphragm and lower intercostals rather than at the larynx. Many cases of pharyngitis in speakers and singers are a result of improper breath control. Proper training in this may frequently result in a cure."

ASTHENOPIA.

Dr. Graves presented a paper on the subject "Asthenopia."

Dr. Klippel.—"The doctor narrowed the facts in his paper down to what has been my experience. Asthenopia generally results from over action. Correcting the error of refraction does not always cure the trouble."

Dr. Phillips.—"The relation of convergence to effort of accommodation needs much study and demonstration. Cases should always be examined for heterophoria. Asthenopia is often due to diseases of the upper air passages. Prismatic correction should be often changed, and changed on the slightest indication."

Dr. R. E. McVey.—"Asthenopia means loss of strength. When I first came to Kansas my eyes became very weak and glasses did not benefit. A rest of the eyes resulted in cure. Nervous exhaustion was probably the cause."

Dr. Longnecker.—"The paper did not bring out the treatment as fully as possible. We should get along without prisms if possible. In low grades of astigmatism if there is hypermetropia would prefer to correct by decentering glasses. In high grades a tenotomy. Heterophoria is likely to appear and disappear on different days according to the effort. The question of relieving asthenopia depends somewhat upon the cause."

Dr. Graves.—"The prevalence of asthenopia is due to overwork. The eye is capable of doing only so much work, and when compelled to do more, asthenopia results. In reference to decentering glasses it is only putting on a pair of lenses and they must be in proportion to the error. As a rule, you will overfit with a prism. You should try them some time before fitting."

DIPLOPIA AND INVERSION.

Dr. Davidson, of Independence, reported the following case: "Boy twelve years old complained of constant headache in anterior part of head. Bromides were given without relief. Urine showed specific gravity 1010 and deficiency of urea, otherwise normal. There was diplopia at times. Correct vision at three feet and diplopia at two fe e t

Turned paper upside down to read at two feet. Inverted vision at any distance with the right eye; also double vision. Vision with left eye correct. Left eye more prominent than the right. Some conjunctival congestion. Patient weak, losing flesh and unable to sit up. A week ago had light cataleptic convulsions. No mental disturbance. Under diuretics specific gravity increased to 1020. Temperature normal, pulse slight accelerated; pupils normal."

Dr. Tiffany.—"There is no such case on record. Diplopia of both eyes is a result of difference in focus. Diplopia of the right eye is probably a result of the development of a new macula lutea. Dislocation of lens nor any anomally of retina or lens would account for the inverted image."

Dr. Minney.—"We have diplopia from lesions of the brain, but not inversion. Why, though, can we not have the inverted image from a central lesion. Headache would point to its being a central lesion."

Dr. Klippel reported autopsy on a case somewhat similar. Had headache and some disturbance of vision. Paralysis agitans of one hand only. On opthalmic examination found choked disc in one eye. The diagnosis was intra-cranial tumor. On autopsy found tumor size of an egg in the base of brain.

"Should a Mydriatic be used as a rule in Refraction Cases?" by Dr. J. E. Minney. (See page 199.)

Dr. Tiffany.—"It is my custom now to ask the patient if it is convenient for them to rest from work for a week or so before using a mydriatic. I do not use it in presbyopic cases; I use atropia. Methyl violet in combination is a valuable addition especially in iritis. In mild cases of astigmatism and when we have simulated myopic astigmatism, after using atropia, we may find hypermetropic astigmatism. I use the optimeter and find it reliable, and do not need a mydriatic in corneal astigmatism."

Dr. Longnecker.—"I rely upon a mydriatic in ninety per cent. of my cases of astigmatism and hypermetropia. In presbyopia I do not use it unless astigmatism is suspected. I use homatropine, six per cent. solution, and four or five applications at short intervals. I think we would cause more inconvenience and take more time without than with a mydriatic. I have more faith in atropia, but on account of the inconvenience and loss of time I use homatropine."

Dr. Klippel.—"I have tried many cases without and in many of them had to use a mydriatic later. I would use it in seventy-five per cent. of my cases excepting presbyopics. A great many cases of hypermetopia in young persons will accept a minus glass."

Dr. Graves.—"I don't use a a mydriatic when I can get along without it. I probably use it in twenty-five or thirty per cent. of my cases. I prescribe the weakest pluss glass they can read perfectly with. If I prescribe a glass to correct the full hypermetropia, I have trouble."

Dr. Longnecker.—"I correct under the mydriatic and have the patient return after the effects have passed away for verification."

Dr. Tiffany.—"In many cases we had better correct the entire error rather than have them come back. They usually complain, but if they will persist they soon get accustomed to them. In regard to such cases as referred to by Dr. Klippel, simulating myopia, these do not need a mydriatic. The shadow test or the opthalmoscope will prove the case."

Dr. Phillips.—"I use a mydriatic in thirty to forty per cent. of my cases, excepting presbyopes. If there is divergence in the preliminary test and in the optalmoscopic test then I use a mydriatic. One element to be mentioned is the rest to the eye secured by the use of atropia. I find it more satisfactory to correct the error completely."

CATARACT.

A paper upon the subject of cataract was presented by Dr. Tiffany.

Dr. Longnecker.—"I have confined my operations to that with the iridectomy. Only in exceptional cases would the simple operation give good results. In a favorable case, where the pupil would dilate well, I believe I would do the simple operation. Would make incision within the cornea."

Dr. Minney.—"I would used boiled water instead of antiseptics. The incision should be large enough as there is danger otherwise of bruising and leaving tissue in the anterior chamber. Hemorrhage should be removed if possible. I have left some hemorrhage and with hot applications have succeeded. Free the wound of all detritus. The iris may get caught in the wound and produce inflammation. Use an assistant to separate the lids instead of the speculum. There is more danger with the speculum, especially in old persons where the capsule is brittle. Slight dressing; protect with cotton. The simple operation is the ideal one. If I cannot get myosis I do an iridectomy. If the corticle substance shows and we can keep down inflammation, wait three or four weeks and do a decision."

Dr. Graves.—"It is a mistake to try to remove blood from an iridectomy; better wait a few days and then remove the lens."

Dr. Tiffany.—"I prefer the speculum to an assistant. I always remove the speculum as soon as the incision is made. I am afraid to leave blood in the anterior chamber as it is likely to produce iritis. I try to get rid of it by crowding the lids gently against the cornea before trying to remove the lens. Have seen cocaine used on the eye in full strength."

[TO BE CONTINUED.]

THE Pasteur hydrophobia cure is a failure. We do not chronicle this with pleasure, but we were hoping better things. From time to time we have given our readers the drift of current opinion on the Pasteur cure for hydrophobia and its results, and they could lead to but one conclusion. It is summed up in the *Medical Times* as given in the heading.

THE "Statute of Limitations" passed by the New York Academy of Medicine should be in force in other medical societies. Ten minutes is the time allotted for an ordinary paper.

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TOPEKA, KANSAS, JULY, 1893.

Some Recent Thoughts in Medicine.

Dr. Hare in the address in medicine before the American Medical Association says that anæmia is only a symptom. It is now looked upon as a manifestation of disease in certain blood-making organs or an important symptom of many perverted functions. The pallor may be due to too few corpuscles or too little hemoglobin. In that form of anæmia, due to a diminution in the number of blood cells, *arsenic* does good, because by its alterative powers it increases cell activity in *blood cell* making organs; while where hemoglobin was lacking, *iron* came particularly into play.

Iron, he thinks, is greatly abused. Too large doses are often given. By excessive doses six to twelve grains a day of reduced iron is meant. The amount of iron in the human body is about thirty-nine grains. The mode of its action is not known.

Asthma is only a symptom. It is no more

a distinct disease than dropsy. It is now known that the obstruction to respiration is not due to the swelling and hyperæmia of the mucous membrane of the bronchial tubes nor to a spasm of the muscular fibers of those tubes. Both conditions exist and both are probably the result of irritation or perverted function of the vagus nerves, for the filiments of this nerve are not only supplied to the bronchial muscles, but also the local vessels. Further than this the peculiar relation of these important nerves to the cardiac, gastric and pulmonary area, and to the recurrent and superior laryngeal nerves all tend to complete a chain of physiological evidence hard to ignore, particularly when we remember that the vagus is the governing nerve of the respiratory function, and that its origin is intimately associated with important vital centers and nerve roots in the medulla.

Diabetes mellitus is another condition which is gradually passing from the list of diseases. There are numerous causes which produce sugar in the urine.

Injury to Bernard's center in the fourth ventricle causes hepatic hyperæmia which in turn results in glycosuria, but section of the vaso-motor fibers in the spinal cord at such a point as to involve the nerves of the liver results in similar disorder.

Pavey has shown that destruction of the superior and inferior cervical sympathetic has this effect, and it has been known to follow intense inflammation or irritation of such nerves as the sciàtic and trigeminus. There is also such a thing as pancreatic diabetes. Extirpation of this gland results in glycosuria, but if one-fifth of it is left behind, sugar does not appear in the urine and this with other facts points to the pancreas having a power through a ferment rather than by its general secretion.

ACCORDING to the therapeutic law, a drug, whose specific medicinal effects can be secured by one dose, cannot modify or affect a structural change. "Neurotics never affect the structure, but the function of an organ."

Summer Diseases.

The hot weather is here and with it the beginning of bowel troubles. While the heat is a factor in the causation of some of these troubles because of its depressing effect when long continued, yet it is only a small factor. The principal cause is the kind of food ingested, but more particularly the quantity, quality and character of the food. An excessive amount taken, or when taken green or overripe or stale, will act as an irritant to the mucous membrane of the alimentary tract or poison the blood, and thus bring on gastric or enteric troubles.

In the treatment of these cases the physician must impress emphatically upon the patient's mind and that of the attendant that diet and hygiene are the essential factors in a cure and in preventing the occurrence of another attack. At the time a simple diet must be taken. Easily digestible fluids and solids, known to agree with the patient, such as milk, eggs, toast, etc., should be given, and cool or hot water, as the appetite may crave—at least the temperature should be such as not to cause pain in the stomach or bowels.

On general principles the bowels should be emptied by a cathartic which will not be drastic in its nature, such as salts of magnesia with a little camphorated tincture of opium or a few drops of the extract of hyoscyamus, after which the hyoscyamus and a little tincture of opium, sufficient to control the pain and irritation, should be given and entire rest should be enjoined. Flushing the colon in some cases is essential, and if there is periodicity a sufficient quantity of quinine should be given to overcome the malaria. The skin should be kept clean and protected from the sudden changes from draughts of air. Thin flannel should be worn next to the skin. With attention to the food, skin and hygiene, but little medication will be required and the mortality lessened.

THE period of incubation of chicken-pox is said to be fourteen days.

A Specialty Impossible.

One organ of the body, the eye, for instance, or one system, the nervous system, cannot be studied and treated alone. They are parts of a whole, and their ailments may be due to pathological conditions in other organs or tissues. This fact appears to be lost sight of at times by specialists, and local treatment and glasses fail to cure the patient. The specialist must keep posted in general medicine to be successful in his specialty.

In some cases, for example in pregnancy, the eye trouble is due to cerebral congestion, caused by the strain in delivery. Such cases, when not due to Bright's disease or diabetes militus, recover spontaneously.

These eye troubles frequently develop at the climacteric. There is photophobia, lachrymation and pain; sometimes a neuritis develops.

These ocular troubles are more frequently found in school girls or where the eye is required to do near work for a long time.

The treatment consists in resting the eye, colored glasses, the application of hot or cold water, whichever is best tolerated, and in case of glaucomatous symptoms, a weak solution of eserine. When the menses are established, the trouble disappears.

THE Iowa State Board of Medical Examiners have recently adopted resolutions to recognize only the diplomas of such schools as require a four-years' medical study, including three courses of lectures of six months each; and after 1898 no college will be recognized which does not require four graded courses of six months each.

A GAS-FORMING bacillus has been found in the urine in cystitis, for which Schow proposes the name of "cocci bacillus ærogenes vesicæ". Now!

The Influence of La Grippe upon the Female Sexual Apparatus.

BY DR. RUDOLF MULLER, OF MUNICH.

The observations of the author are based upon fifty-one cases. He comes to the following conclusions:

In three patients, who were pregnant, influenza caused twice interruption of the gravid state. In forty-eight cases of influenza in non-pregnant women affection of the genitals was forty-six times produced by the influenza. The influence of "La Grippe" upon the female genital organs is therefore not to be denied. It is manifested in pregnant women by interruption of gestation. In non-pregnant women its influence is demonstrated by the appearance of profuse metrorrhagias, which are characterized by long duration and resistance to the usual remedies. These metrorrhagias are accompanied by strong swelling; also enlargements of the uterus, as well as by aggravation of the symptoms in those patients afflicted with diseases of the genital organs.

The mentioned metrorrhagias were "real metrorrhagias" and not menorrhagias. They appeared not at the time of the usual menstrual flow, but most frequently during the first days of the influenza symptoms. The cessation of these metrorrhagias stood in no relation to the disappearance of the influenza symptoms; but, on the contrary, they lasted, often with the same intensity, throughout the convalescent stage and beyond the latter, even for days after the disappearance of the disease. Whether the intensity of the metrorrhagia stands in the same relation to the intensity of the influence or *vice versa* the author cannot say, but he would assert that in all his cases the metrorrhagias were equally severe, no matter whether the influenza symptoms were severe or not. (*Centralblatt fur Gynakol, 1890.*)

TRUE epileptic seizures, it is now claimed, have their origin in the cortex and practically no where else.

Report of the Committee on Permanent Organization of the Pan-American Medical Congress.

An organization has been effected under the style and title of the Pan-American Medical Congress, to be held at the city of Washington, D. C., September 5, 6, 7 and 8, A. D. 1893, under the presidency of Prof. Wm. Pepper, M.D., LL.D., of Philadelphia. The details of the organization are set forth in the published preliminary announcement of the Congress, copies of which are respectfully submitted herewith, in both English and Spanish, as a part of this report.

Since the publication of this preliminary announcement an organization has been effected in Paraguay. Your committee is therefore pleased to state that an organization of the Pan-American Medical Congress exists in every state and territory in the United States, and in every remaining country and colony of the Americas, including the West Indies and Hawaii.

A provision has been adopted since the foregoing publication whereby every medical society — national, colonial and local — has been made a constituent organization of the Congress.

The committee begs leave to report further that the organization which has been effected as above, and which, by the authority you have conferred upon it, has been and is already very actively engaged in carrying out the practical ends of the Congress.

The senate and house of representatives at the first session of the last congress adopted a joint resolution, authorizing the president to extend an invitation to the governments of the Western Hemisphere to send official delegates to the meeting and to appoint similar delegates on behalf of our own government. This official invitation has been issued through the department of state, and all replies so far received have been in the nature of acceptances. The president has indicated that the government of the United States will be represented at the Congress by six delegates. At the last meeting of the executive committee of the Congress a resolution was adopted directing that in view of the Columbian exercises in progress in America this year, and in view of the relations which have become intimate between the United States and Spain, that the government of the latter country be requested to send delegates to the Congress. It was thought that the exceptional relations of amity existing between the two countries would warrant a course which has been avoided with regard to all other European countries out of deference to the interests of the International Congress which is to meet in Rome.

The National Congress at its last session appropriated fifteen thousand dollars ($15,000) for the purposes of entertainment of the meeting.

The president of the United States has consented to open the Congress in person, and to extend the courtesy of a reception at the White House to delegates and their families.

A special feature of the Congress will be the proceedings of the sections on hygiene, climatology and demography, and on marine and hygiene and quarantine. The proceedings of these sections will be largely of the nature of a sanitary conference with particular reference to practical questions of public health and of imminent importance.

With this object in view, every municipality of the three Americas, including the West Indies and Hawaii, has been invited to send an official delegate, and a very large number of acceptances have already been received.

The titles of several hundred papers, accompanied in many instances with abstracts, have already been received from representative medical writers in the English, Latin, French and Portugese countries. This, of itself, assures the scientific success of the Congress.

Invitations have been extended to representative European scientists to be the guests of the Congress, and a number of acceptances have been received.

In conclusion your committee begs leave to express its appreciation of the spontaneous response to its appeal for funds in the form

of advance registration fees from the public-spirited representatives of our profession in America. Let it be remembered no registration fees will be accepted from members of the Congress residing outside the United States. Although money has been realized from advance registrations in amount sufficient to pay some of the preliminary expense of organization, a still larger sum is needed with which to meet accumulated obligations.

It should be held in mind that the congressional appropriation, meager as it is, will be available only for purposes of entertainment at the time of the meeting, and that the expense involved in publication, correspondence and clerical work is necessarily very heavy and must be met at once. The members of the profession are therefore again urgently requested to register at once by paying the fee ($10) to the treasurer, Dr. A. M. Owen, Evansville, Ind.

Those who thus become menbers of the Congress, but who may be prevented from attending the meeting, will receive a set of the transactions which of themselves promise to be worth more than the amount of the registration fee.

Respectfully submitted on behalf of the committee. CHARLES A. L. REED,
Chairman.

Microbes in Dust.

Dr. Manfredi has made an elaborate investigation of the dust of the streets of Naples. The number of microbes of all kinds he found on the average to be 761,-521,000 per gramme. In those portions of the city under the best hygienic conditions, the average number of microbes was only 10,000,000 per gramme. It the busiest thoroughfares the average rose to 1,000,-000,000, and in some of the dirtiest streets it rose to 5,000,000,000 per gramme. In this boundless ocean of life he found a large number of the pathogenic organisms, and the unhealthfulness of the street was in proportion to the number of microbes in the dust. He tested carefully the infective power of the dust, and obtained positive results in seventy-three per cent. of the experiments. Of forty-two cases in which he communicated to guinea-pigs by inoculating them with with the dust of Naples, he found the microbe of pus in eight, the bacillus of malignant œdema in four, the bacillus of tetanus in two, the tubercle bacillus in three, besides several others which had the power of inducing fatal septicæmia in the guinea-pigs on which they were tried.

SQUINT in children should be corrected early in life. If let go for a number of years there is apt to be functional impairment of the retina, due to imperfect visual impressions conveyed to the nerve centers. An error of refraction may be the cause of imperfect retinal images. Correct the error and the development of the retina continues and the squint is corrected.

We have fitted glasses to children three years old. True, it is not so satisfactory as when they are older, and there is more liability of breakage and injury to the eyes by broken glass and frames, but so far this has not happened in our practice.

If glasses fitted under atropine fail to correct the squint after a few months' trial, or the error of refraction cannot be corrected, an operation should be done if the squint is unsightly.

In case of lack of development and where the lenses improve the vision, we may promise marked improvement eventually where full correction is made.

Hydrogen Peroxide in Asthma.

Chas. E. Warren, M.D., in the *Medical Age*, June, 1893, claims to have used peroxide of hydrogen for three years with success in the treatment of asthma.

By means of a condensed air apparatus and a nebulizer he produces a cloud of vapor of hydrogen peroxide around the patient. He says: "The relief afforded by this means

is due, I think, to a superoxygenation of the inspired air, as a result of which the smaller amount of air inhaled, being largely reinforced by oxygen, is of the same functional value to the system as a larger amount of ordinary air. The blood is thus put into normal condition, and the dyspnœa is cut short, as the blood exerts its normal action on the respiratory and circulatory centers, counteracting the deleterious effect of the underoxygenated blood, due to unrelieved dyspnœa."

He uses this spray during attacks of dyspnœa and after any exertion which is likely to bring on an attack. In very severe paroxysms he uses the iodide of ethyl by inhalation, which he claims acts like magic.

SURGERY.

The Treatment of Epithelioma Without the Knife.

Having often heard the vaunted cures of epithelioma by means of salves, pastes, ointments, etc., secured by some hocus pocus from a Hottentot, and having been compelled to seem entranced by a story related by a dear friend (intelligent on all other points) of how he had seen a certain paste actually take out a cancer by the roots and shake the dirt off of said roots, we are glad to notice that a few gentlemen, noted in our profession, are making an effort to separate the chaff from the grain, and give us food both for reflection and application. The average practitioner has had for years an inward consciousness that these so-called fraudulent nostrums had some virtue in them, for has he not seen cases pass from beneath his threatening knife to be cured by a paste of incompatibles applied in an unscientific way. While we should recognize and insist on the potency of the knife in certain cases, we should not drive our patients to the charlatan or dismiss him without hope by telling him this is the only remedy. We have remedies other than the knife that have been tried and proven efficacious in thousands of recorded cases, the most potent of which are some form of caustic that separates the diseased from the healthy tissue and which seem to have either an elective action or an action regulated by the vulnerability of the tissues.

Whether we will ever possess a remedy of slower and less painful action, and equally as efficacious, seems doubtful in the present light of our knowledge of the etiology of the disease, still there is a faint hope that such may be the case.

Remedies that do not act quickly seem to favor the reappearance of the disease by producing only such a degree of inflammation as to dilate the lymphatics and allow the epithelia to pass into their lumen, thereby making a new foci of infection. While there are numerous remedies that have a limited field of usefulness, *i. e.*, in incurable cases where palliation is our only recourse, such as salicylic acid, pyoktanin, resorcin, eucalyptus and fuchsin. We have also a few remedies that take equal, if not superior, rank with the knife in many cases. Such remedies are chloride of zinc, arsenious acid, caustic potash and pyrogallic acid. Each of these have their advocates, much depending on their manner of use and the proper selection of the cases to be operated upon. The chloride of zinc is most frequently used in the form of Bougard's paste, the formula of which is: Wheat flour, amylii, aa ℥ i; acid arsenious pulv., grs. viii; hydrarg. sulph. rub., ammon. mur., aa ℈ ii; hydrarg. bichlor. corros., grs. iv; zinci chloride cryst., ℥ i; aquæ. fervid, ℥ iss. The first six substances are finely ground and then mixed in a glass mortar. The zinc is dissolved in the boiling water and this solution slowly added to the powder, the contents of the mortar being kept rapidly moving with the pestle until all the solution is added; then let it stand twenty-four hours before using. Apply it to the part affected, spread thickly on muslin, and leave on twenty-four hours. It is usually painful, but the pain can be mitigated by adding cocaine to the mixture; ten per cent. is usually sufficient. A simpler formula for the chloride of zinc paste is equal

parts of the zinc and wheat flour. Arsenious acid is usually used in the form of Marsden's paste, which consists of equal parts by weight of arsenious acid and powdered acacia, rubbed well together and enough water added to make a firm paste. It is necessary to make this fresh each time. The length of time this is to be left on varies with the depth of tissue to be removed, and is usually from eighteen to thirty hours. Its elective action on pathological structures is thought by Dr. A. R. Robinson, of New York, to be the reason of its doing quicker work than the zinc paste. The arsenious acid paste is preferable where it is desired to save as much tissue as possible.

Caustic potash has some advocates, and on account of destroying tissue far beyond the infected area is reputed to be ever superior to the knife in the earlier stages of epithelioma. It is quite painful, and should not be used about the eye, upon the alæ of the nose or near large bloodvessels. Pyrogallic acid, ℥ i to ℥ i of vaseline, applied continuously from two to seven days. acts somewhat like arsenic and causes little pain. It is a suitable application for peri-epitheliomatous lesions after curetting. After the application of all of these remedies, the parts are to be let alone until the sloughing occurs, then dressed with vaseline or officinal glycerine ointment, or such plain applications as indications would suggest.

Metatarsalgia.

Dr. Thomas K. Morton in the *Denver Medical Times* reports the cure of six cases of this rare but painful affection by operation. The operation consists in the excision of the fourth metatarso-phalangeal joint—the usual seat of the disease. The error in diagnosis, made by two surgeons in case II, where periostitis of the tibia was thought to be the disease, and the tibia cut down upon and scraped, gives some idea of the severity of the pain and the possible errors in diagnosis. The cases for operation are usually those due to an injury, such as a sudden twisting of the foot, stepping on some small object, or constant slight injuries to the foot, caused by certain occupations. It seems more prevalent, too, in persons subject to neuralgia, and may occur in more than one member of a family. A gouty diathesis, too, is a predisposing cause; the latter cases, however, are usually relieved with appropriate remedies without an operation. The symptoms are intense cutting pain in the region of the base of the fourth toe, this pain extending up the front of the tibia and being continued to the entire sciatic distribution. The pressure of a shoe in any but the slighter forms intensifies the pain. Slight affections of this nature may be relieved by a proper shoe and a flannel bandage to keep the toes from rolling.

In regard to excising the nerve, Dr. Morton thinks there would be difficulty in finding the nerve, and unless all the soft parts surrounding the joint were removed, some branches would remain. He is of the opinion that the pain is due to the peculiar relation of the fourth joint as compared with the third and the fifth.

Management of Suppuration, Complicating Tubular Disease of the Bones and Joints.

Dr. V. P. Gibney summarizes a paper on the above subject, as follows:

1. Protect the joint above which the bone lesion exists in the early stage and in the later stages, whether the abscess is let alone, aspirated or incised.

2. In cases where the suppurative process is confined to a small area, it is good surgery to leave the small abscesses alone if the protective appliance is adequate.

3. It is good practice to aspirate where the abscess is in the way of the proper adjustment of apparatus, and by such procedure one may expect good results in at least fifty per cent.

4. The simple incision of an abscess, dependent upon bone disease, depends for good result upon the extent of the lesion.

5. Excision of the hip is not a measure to

be employed in all cases where extensive suppuration exists, but must depend largely upon the condition of the patient, and the location and extent of the abscesses.

6. Expectant treatment of the knee and ankle joint in children yields the best results for life and limb.

7. Amputation of the ankle in a child is rarely ever justifiable; of the knee is justifiable only when amyloid disease of liver or kidneys threatens, or is present; of a hip after thorough excision has failed.

8. The long-continued employment of a good fitting splint to the back in Pott's disease of the spine will yield better results than any operative procedures on the bone with which I am familiar.

A Successful Cæsarian Section.

In these days, when the symphyseotomy wave is running high, it is refreshing to record a case where the better judgment of the surgeon prevailed over the desire for fame, and additional honor given to an operation, threatened to be relegated to the past. Dr. A. P. Dudley, of New York, successfully did the above operation, both mother and child being saved.

NEW REMEDIES.

Special Railroad Rates for the First Pan-American Medical Congress to be held at Washington, D. C., September 5th to 8th Inclusive.

The Chesapeake & Ohio Ry. from Cincinnati or Louisville to Washington, D. C., is the quickest, most picturesque, interesting and comfortable line between those cities. Their trains are vestibuled throughout, lighted by electricity, and carry the latest patern of through first-class coaches, dining cars and sleepers.

The scenery along the upper Ohio and Kanawha rivers, through the gorges and canons of the New river, among the peaks and valleys of the Blue Ridge and Alleghany ranges, and over the fertile plains and historic battlefields of Virginia, constitutes a kaleidoscopic panorama that for variety, beauty, grandeur and historic interest is unequaled in this country.

The rates of fare will be the same by all of the lines, and while they have not yet been agreed upon, they will positively not be more than one and one-third fare for the round trip. The one way rates are as follows: from St. Louis, $19.25; Chicago, $17.50; Cincinnati, $14; Indianapolis, $16; Louisville, $16.

Tickets will be sold at those places September 1st to 4th inclusive, good to return leaving Washington as late as September 12. Ask for your tickets "via the Chesapeake & Ohio Ry."

If you will advise me what day you will leave any of the places named and whether in the morning or evening, and how many berths you will want, I will reserve them through to Washington for you.

Write for a copy of "Virginia in Black and White." E. B. POPE,
Western Passenger Agt., C. & O. Ry.,
St. Louis, Mo.

I HAVE found Peacock's Bromides exceedingly efficacious in headache and cerebral congestion, more so by far than the ordinary bromides. JAMES MACMUNN,
L. R. C. P., L. R. C. S.,
Resident Medical Officer Great Northern Hospital, London.
39 Cecil Park, Crouch End.

I HAVE used Cactina Pillets and find them very valuable in common heart troubles when weakness and irregular action is manifested. I shall use them in the future.
ALBERT DAY, M. D.,
Superintendent and Physician of Washingtonian Home, Boston, Mass.

The Therapeutic Action of Salophen.

Dr. Edmund Koch, in an inaugural dissertation presented to the University of Freidburg, reports a large number of cases treated with Salophen, and gives the follow-summary of his observations:

If we compare the above results we find that Salophen proved most efficient in acute articular rheumatism where it rapidly and promptly removed the pains, fever and swelling within a short time. We have met with no case where it failed to act. In efficacy it is almost equal to salicylic acid, over which it has the advantages of not possessing a disagreeable taste and of not being attended by the disturbances so frequently observed during administration of salicylic acid which so often neutralize the good effects of the remedy. Doses of three-fifth grammes Salophen *pro die* are amply sufficient in the less severe cases. I am also able to confirm the statement of Dr. Gottmann that the more recent the case the more certain will be the effect.

Although in acute articular rheumatism the results from the use of Salophen were very favorable, they were inconsiderable in chronic rheumatism and arthritis deformans. Occasionally it effected some relief of the pains, but permanent improvement was never observed.

As regards the antipyretic effects of the remedy, I am unable to give a decision. In the two cases reported where a high temperature existed, it quite rapidly reduced the fever. At any rate, it may also be tried in cases of fever.

Salophen appeared extremely effective in nervous affections of the most diverse character. In these troubles, it acted even in small doses, 0.75-2 grammes, with great rapidity, in most cases removing or at least relieving the pain. In neuralgias it seems an excellent remedy and may be tried as a substitute for other nervines, such as antipyrine, Phenacetine, acentanilid. In minor nervous affections, such as headache, toothache, etc., it is also indicated. These observations I find confirmed in an article by Dr. Camier, of Elberfeld,* which came to my notice after conclusion of my experiments. This observer also tried Salophen in various nervous troubles, such as habitual headache, trigeminal neuralgia, sciatica, hemicrania. His conclusion is that Salophen is a prompt analgesic in various neuroses, and that no toxic effects were noted in any of the cases observed by him.

As above stated, I have not investigated the antiseptic and disinfectant action of Salophen.

If in brief I formulate my conclusions, the following may be said:

In acute articular rheumatism, Salophen has a specific effect, almost as marked as that of salicylic acid.

In chronic articular rheumatism it is less effective, but may be employed as substitute for other remedies, since it relieves the pain at least at the beginning of its administration.

In the most diverse nervous disorders it exhibits an excellent analgesic effect.

Disagreeable after-affects are never seen in 3-5 grammes which are amply sufficient.

*Observations on the Use of Salophen, Therap. Monatsh. October, 1892.

American Versus Foreign Pharmaceutical Articles.

Inconsistency is probably the most common failing of mankind. We find a lot of doctors who are unwilling to use an American proprietary article, such as advertised in the medical journals, yet doctors and medical journals take up foreign articles, even when the formula is *secret* and *patented*, and use them.

Why can't an American pharmacist make as good a thing as a German, for instance? Further, the former doesn't talk about a trademark and *conceal his formula.*

This country is getting old enough to let go the leading strings and lead itself. If you can get a good non-secret preparation in America, what on earth is the use of importing some patented article from abroad? Be consistent.—*Atlanta Med. and Surg. Journal, May, 1893.*

A Course of Lectures Free.

We will pay the tuition in the Kansas Medical College for the session of 1893 and 1894 for any medical student who will send us before September 15th 100 new cash subscribers to the KANSAS MEDICAL JOURNAL.

ABOUT two years ago the Chemische Fabrik auf Actien, vormals E. Schering, of Berlin, after long experimenting in its laboratory by its staff of chemists, produced a new chemical product, which at first seemed to be identical with spermine. Through clinical trials this supposition was quickly found to be erroneous, but further experiments developed the interesting fact that the new product was a uric acid solvent. This notable scientific discovery was achieved independently by the Schering laboratory, and it deserves credit for enriching materia medica with so valuable a new therapeutic agent.

The name "Piperazin" was adopted for the product, and Piperazin-Schering has in two years become widely known to the medical profession throughout the world as the most powerful uric acid solvent known. Scores of clinical reports by the highest authorities, among them such names as Dardet, Biesenthal, von Mering, Schwenninger, Vogt, Ebstein, D. D. Stewart and J. H. Bradford (the last two of Philadelphia), have been published in the leading medical journals of the world; and all these reports were based solely on the use of Piperazin-Schering.

Now, recently, a German manufacturing firm, which furnishes a number of other new remedies, has claimed to have discovered a new process yielding a product which they claim is identical with Piperazin-Schering, and without waiting to give their product thorough clinical trial, they and their agents are making the attempt to sell the untried product. With reprehensible, not to use a severer characterization, enterprise they appropriated all the literature based on Schering's Piperazin for their own advertising purposes, and with other questionable methods, such as tempting by lower price, they bolster up their claims and bid for preference for their product.

It is possible that the new competing product may justify its makers claim, but is it fair to precipitate an untried remedy on the medical profession on a mere theoretical claim of identity with Piperazin-Schering? Aside from the fact that this firm has no moral right to appropriate for its own profit the legitimate property of the Schering laboratory, it exhibits superlative presumption in inviting the medical profession to use a product with which not a single clinical trial has been made or published as yet.

A PRACTITIONER devoting especial attention to the diseases of children says: "In the treatment of choleraic diarrhœa we are safe, it matters not at what time we may be called, in administering some antiseptic medication, something which will prevent fermentation and have a destructive effect upon the septic germs more than likely present in the alimentary canal. Happy effects are often secured by the use of listerine properly diluted; a favorite prescription is the following:

℞

Lambert's listerine.....
Glycerine (c. p.).....
Syr. simpl.....
Aquæ cinnamon.....aa...℥ j

M. Sig.: Teaspoonful every one, two or three hours, as may be indicated.

Taking into consideration the component parts of Listerine, it impresses me favorably as a prophylactic and remedial agent for cholera, along with other intestinal disturbances. The eucalyptus, thyme, gaultheria and boracic acid which it contains are all antagonistic to germ life and oppose fermentation. The preliminary diarrhœa (cholerine, as it is called) may well receive teaspoonful doses of Listerine combined with the same amount of glycerine; in fact, I should be inclined to recommend to the laity this combination as a prophylactic measure."

SANMETTO.—I have used several bottles of Sanmetto in my practice, and can unhesitatingly recommend it in cystitis, disease of prostate, and sexual impotence. I have lately succeeded, by its use, in curing a patient who had been under the care at different times of four physicians of undoubted skill. The man, æt. thirty-two years, had suffered from childhood with incontinence of urine, of late years obliged to rise six or seven times nightly to urinate. This act always gave him pain. For the last five years quantities of thick, stringy mucus were passed, and occasionally clots of blood. His health gradually became undermined, and the consequent emaciation, lassitude, and nervousness made it necessary to give up his occupation. Besides, all sexual power was lost. In less than a month after beginning the use of Sanmetto, power of erection returned, pain in prostate disappeared, and he urinated but once in the night. In two months blood disappeared from the urine and his weight increased eleven pounds. I now buy Sanmetto by the case, and shall continue to employ it whenever indications warrant. This testimonial is entirely unsolicited, and is the first I have ever given to any proprietary medicine, though I am now over fifty years of age. The manufacturers of Sanmetto make it possible for me to thus indorse the preparation by the way in which the product of their laboratory is presented. Neither indications nor dose appear on the bottle; nor is it surrounded with a wrapper describing its uses. In this respect they commend themselves to the profession. I cordially wish its manufacturers prosperity, and that Sanmetto may be as fully and widely known as its merits and the honorable character of its manufacturers deserve.

D. P. MERRITT, M.D.,
Elmira, N. Y.

Dr. G. D. KINGSBURY says: "I have used Elixir Three Chlorides, R. & H., with great success in cases of struma and general debility. I think it a remedy unequaled in cases you mention. I shall continue using it."

Modern Treatment of Tuberculosis.

As a reconstructive agent, cod liver oil has long been recognized as superior to all other agents of this class, provided it can be administered in such form as to be easily digested and assimilated by the debilitated tissues. If it is not digested, if fermentation is produced it not only fails to bring about the desired result, but increases the disturbance in the stomach and interferes with the digestion of other foods.

Creosote is now generally recognized as the remedy giving the largest per cent. of good results in the treatment of tuberculosis. It reduces the temperature, allays the cough and destroys the bacilli.

A combination of these two remedies in a palatable form with the addition of such other agents as would increase the digestibility of the oil was the object of the Kaw Pharmacal Co., in producing the remedy known as Guaiacoline. The results obtained from its use and the entire absence of unpleasant eructations which characterize the administration of either drug alone has demonstrated the value of the combination.

It is an alkaline, antiseptic, nutrient emulsion which prevents fermentation and aids digestion.

L. B. GRANDY, M.D., demonstrator of anatomy and microscopy, Southern Medical College, Atlanta, Ga., says: "Antikamnia has given me the most happy results in the headaches and other disagreeable head symptoms that have accompanied the late catarrhal troubles prevailing in this section. In my practice it is now the remedy for headache and neuralgia, some cases yielding to it which had heretofore resisted everything else except morphine. I usually begin with a ten-grain dose, and then give five grains every fifteen minutes until relief is obtained. A refreshing sleep is often produced. There seem to be no disagreeable after-effects."